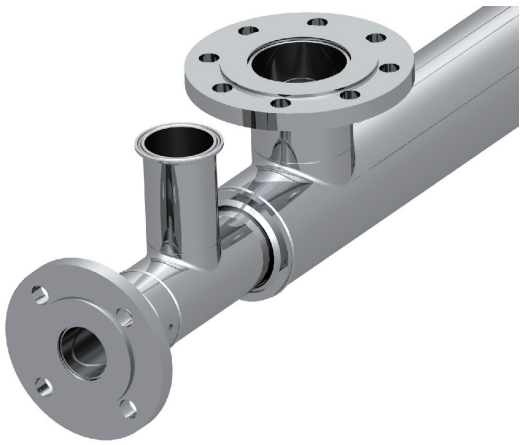
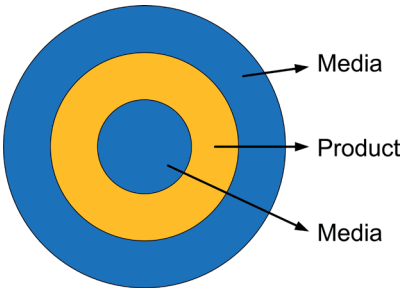
AS SERIES
ANNULAR SPACE HEAT EXCHANGER



The triple tube or annular space heat exchanger is used for heat transfer applications with viscous fluids. It consists of three concentric tubes. Product flows through the annulus between tubes 2 and 3. The media fluid flows in the other two channels. The product is therefore heated or cooled from both sides. Corrugated tubes are used to increase heat transfer rates. The result is a highly efficient heat exchanger for difficult heat transfer applications.



APPLICATIONS:

Medium to high viscosity fluids.
Fluids containing fibres or small particulates.
Food applications, industrial applications.

MATERIALS:

Service side: AISI 304 stainless steel.
Product side: AISI 316L stainless steel.

CONNECTIONS:

Shell side: Flanged
Tube side: Clamp

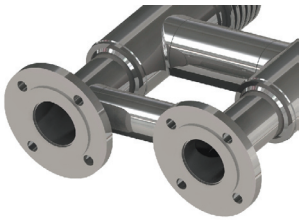
FINISHING:

Externally polished.
Tube side: roughness < 0,8 microns.

DESIGN CONDITIONS:

Service side: up to 10 barg / 150 ºC
Product side: 10 barg / 150 ºC

An expansion bellow is fitted in the outer shell for absorbing the differential expansion between the shell and the second tube.



The innermost tube is removable, which allows for inspection of the product annulus.

For large duties, multiple units can be interconnected and mounted in a frame.

RANGE:

Models	Lengths (m)	Surface area (m2)	Shell side connection	Tube side connection	Max flow shell (m3/hr)	Max flow tubes (m3/hr)	Volume Shellside L	Volume Tubeside L
AS 76/51/25	3,0 - 6,0	1,4	DN40	1”	20	4	15,6	7,8
AS 104/76/51	3,0 - 6,0	2,4	DN65	2”	45	16	30,5	13,1
AS 129/104/76	3,0 - 6,0	3,4	DN80	2,5”	70	25	47,9	19,8
AS 154/129/104	3,0 - 6,0	4,4	DN80	3”	95	34	74,7	22,7

PROVIDING THE TECHNOLOGY FOR HEAT TRANSFER SOLUTIONS

Head Office: TPS Heatexchangers Ltd 2 Pineridge ,Donaghadee Co Down . BT21 0QR Tel +44(0)28 91 883875
Dublin tel +353 1 2820624 or mobile +353 87 7485333
e mail ivan@tpsheatexchangers.com www.tpsheatexchangers.com david@tpsheatexchangers.com